

A FURTHER DIAGNOSTIC CHARACTER AND SOME BASIC BIOLOGICAL INFORMATION FOR *LERISTA COLLIVERI*. *Memoirs of the Queensland Museum* 42(2): 474, 1998. The limb reduced, Queensland skink *Lerista colliveri* was recently recognised as distinct from *L. allanae* (Couper & Ingram, 1992; see also Shea, 1993 and Covacevich et al., 1996) on the basis of two characters, one morphological and one colour. Morphologically, *L. colliveri* differs from *L. allanae* in having the front limb represented by a nubbin versus, at most, a shallow depression. In colour pattern, *L. colliveri* differs from *L. allanae* in having continuous, dark longitudinal lines dorsally and laterally, and ventral scales with or without dark flecks versus longitudinal lines of dark spots dorsally and laterally, and ventral scales dark edged. Recent work has revealed a second morphological character distinguishing the two species, about which there had been some residual taxonomic concern (Covacevich et al., 1996), and provides an opportunity to make some general observations on *L. colliveri*, the better known of the two species. We report this new information in this note. Specimens examined in addition to those reported in Couper & Ingram, 1992 are as follows: *L. colliveri* - QMJ59904-05, 61265-66, 61270, and *L. allanae* - SAMR2823 (Shea, 1993).

The new diagnostic character for the two species of *Lerista* is the number of infralabials contacted by the postmental: one (bilaterally in 31 specimens) in *L. colliveri* vs usually two (bilaterally in 8 specimens; 1, bilaterally in 1 specimen - QMJ12232) in *L. allanae*.

The two species also differ somewhat in the way they appear to fuse supraciliaries. Both species have six as the maximum number of supraciliaries, but when there are five continuous supraciliaries (i.e., no fusions with the supraoculars), this is achieved through the fusion of supraciliaries one and two (unilaterally, AMR113538), two and three (unilaterally, AMR113526), four and five (unilaterally, AMR113516), or five and six (bilaterally, AMR113532) in *L. colliveri* (total of five cases in 25 specimens) and through the fusion of supraciliaries one and two in *L. allanae* (all five cases of supraciliary fusion in the seven specimens in which the supraciliary area is undamaged, QMJ6040, 6238, 6429-30, 12232). Thus *L. colliveri* appears to be much more variable in the way it fuses supraciliaries than does *L. allanae*.

L. colliveri has seven premaxillary teeth ($n=25$; total), 9-12 maxillary teeth (mean = 10.2, $n=25$; left side), and 12-15 dentary teeth (mean = 13.2, $n=25$; left side). There is a significant positive correlation between head length (tip of snout to centre of external ear opening), and the number of maxillary teeth ($r=0.41$, $P=0.049$) and dentary teeth ($r=0.72$, $P<0.001$), and between snout-vent length and the number of maxillary teeth ($r=0.41$, $P=0.045$) and dentary teeth ($r=0.66$, $P<0.001$).

In *L. colliveri*, the least squares regression of log head length (tip of snout to centre of external ear opening) on log snout-vent length has the equation $\log \text{head length} = 0.63 \log \text{snout-vent length} - 0.29$ ($r^2=0.96$, $n=15$, $P<0.001$) for males, and $\log \text{head length} = 0.59 \log \text{snout-vent length} - 0.24$ ($r^2=0.97$, $n=10$, $P<0.001$) for females. The 95 percent confidence interval (± 0.08) for the slope of the regression for each sex (0.63 and 0.59, respectively) is well below the isometric value of 1.00, indicating that head length becomes proportionately shorter as snout-vent length increases.

The slopes of the two regression lines are not significantly different ($F=0.55$, $df=1, 21$, $P=0.46$). However, the elevations are significantly different ($F=11.22$, $df=1, 22$, $P=0.003$), indicating that males have relatively longer head lengths than females.

In *L. colliveri*, the least squares regression of log rear limb length on log snout-vent length has the equation $\log \text{rear limb length} = 0.57 \log \text{snout-vent length} - 0.32$ ($r^2=0.86$, $P<0.001$) for males, and $\log \text{rear limb length} = 0.43 \log \text{snout-vent length} - 0.08$ ($r^2=0.80$, $P<0.001$) for females. The 95 percent confidence interval (± 0.14 and ± 0.17 , respectively) for the slopes of the regression (0.57 and 0.43, respectively) for males and females fall well below the isometric value of 1.00, indicating that rear limb length becomes proportionately shorter as snout-vent length increases.

The slopes of the two regression lines are not significantly different ($F=2.25$, $df=1, 21$, $P=0.15$). However, the elevations are significantly different ($F=5.58$, $df=1, 22$, $P=0.03$), indicating that males have relatively longer rear limbs than females.

In *L. colliveri*, the least squares regression of log hind limb length on log head length for both sexes combined has the equation $\log \text{hind limb length} = 0.83 \log \text{head length} + 0.01$ ($r^2=0.84$, $P<0.001$). The 95 percent confidence interval (± 0.15) for the slope of the regression (0.83) falls below the isometric value of 1.00, indicating that hind limb length becomes proportionately shorter as head length increases, as it does as snout-vent length increases (above). The sexes were combined because the slopes and the elevations were not significantly different between the sexes ($F=0.87$, $df=1, 21$, $P=0.36$, and $F=1.08$, $df=1, 22$, $P=0.31$, respectively).

Data on clutch size is available for four specimens of *L. colliveri*. Three specimens (AMR113527, 113533, 113538) collected in the vicinity of Red Falls, the Basalt Wall, N of Charters Towers (latitude: $19^{\circ}56'S$) in the period 10-12 Sept., 1984 contain a single yolking follicle in each ovary, and one specimen (QMJ33128) collected at Battery Stn (latitude: $19^{\circ}26'S$) on 12 July, 1981 contains a single shelled egg in each oviduct. These data suggest that the species is oviparous with a clutch size of two, and that egg laying may occur during the tropical dry season (QMJ33128).

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Literature Cited

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